

ABSTRACT OF THE DISCLOSURE

There are provided a 3D-shape displaying program and an image processing apparatus which can display complicated three-dimensional objects by employing a distinctive data structure, and which allows the positional relationship between a specific point such as a character and a plane of a 3D-object to be easily grasped. A regular octahedron whose vertices are on one of the three-dimensional axes is used as a basic 3D-shape. Each of the eight planes of the regular octahedron is previously subdivided into a plurality of triangular regions, which are given specific ID numbers which can identify addresses in a memory. In the memory, a data storage area is previously secured for each ID number, where data such as a distance from the origin to each vertex of the triangle, a plane equation for the triangle, and a surface pattern are stored. Thus, for each triangle composing the basic regular octahedron, data for displaying the triangle is stored, so that it is easy to refer to the data on the basis of the ID numbers, and various 3D-shapes can be easily displayed by arbitrarily data alteration.